

What is claimed is:

1. A vacuum cleaner bag comprising: an impermeable media forming a cavity for storing a dirt; an inlet for attachment of said bag to a vacuum cleaner and for conveying said dirt into said cavity; and an integrally connected air-permeable particle separator means sealed over an exit hole in said impermeable media for retaining said dirt in said cavity as a clean air exits said bag.
- 5           2. The bag of claim 1 further comprising a re-sealable bag open-end means for removing said dirt and reusing bag.
- 10          3. The re-sealable bag open-end of claim 2 wherein said bag open-end means consists of interlocking parts for closing and opening end of bag consisting of said impermeable media.
- 15          4. The resealable bag open-end of claim 3 further comprising a slider means to facilitate opening and closing bag open-end.
- 20          5. The air-permeable particle separator means of claim 1 wherein air-permeable particle separator means is air-permeable material capable of separating dirt from airflow.
- 25          6. The air-permeable particle separator means of claim 1 wherein air-permeable particle separator means is a frame sealed to said exit hole of said impermeable media and a pleated media is sealed in said frame.
- 30          7. The air-permeable particle separator means of claim 1 wherein at least one layer is expanded polytetrafluoroethylene (PTFE) membrane.
8. The air-permeable particle separator means of claim 1 wherein at least one layer is microfiberglass.
9. The air-permeable particle separator means of claim 1 wherein at least one layer is paper.
10. The air-permeable particle separator means of claim 1 wherein at least one layer is non-woven.
11. The air-permeable particle separator means of claim 1 wherein at least one layer is electrostatic.
12. The impermeable media of claim 1 wherein said impermeable media is transparent for observing contents of bag.

13. The air-permeable particle separator means of claim 1 wherein air-permeable particle separator means consists of flat media.
14. The bag of claim 1 further comprising antimicrobial materials.
15. The bag of claim 1 further comprising odor modification means.
- 5       16. The bag of claim 1 wherein air-permeable particle separator is replaceable.
17. The air-permeable particle separator means of claim 1 wherein said air-permeable particle separator means is protected by a shield.
18. The air-permeable separator means of claim 1 further comprising a pre-filter means.
- 10     19. The method of collecting a dirt in a vacuum cleaner wherein:
- An inlet of a bag comprising impermeable media and an air-permeable particle separator is installed in a vacuum cleaner in an essentially leak-proof manner;
- Dirt is conveyed into bag cavity;
- Air-permeable particle separator separates dirt from air; and
- Cleaned air exits said bag through said air-permeable particle separator and said dirt is retained in said bag cavity.
- 15     20. The method of collecting a dirt in a vacuum cleaner bag, emptying its contents and reusing said bag wherein:
- An inlet of a bag comprising impermeable media and an air-permeable particle separator is installed in a vacuum cleaner in an essentially leak-proof manner;
- Dirt is conveyed into bag cavity;
- Air-permeable particle separator separates said dirt from air;
- Cleaned air exits said bag through said air-permeable particle separator and said dirt is retained in said bag cavity;
- Bag is removed from vacuum cleaner;
- Bag is opened and dirt is removed;
- Bag is re-closed; and
- 20     30     Bag is re-installed in vacuum cleaner for re-use.